CLAIMS

We Claim:

1. A method of producing a gp350 protein for use in pharmaceutical compositions comprising:

(a) culturing host cells transformed with a DNA sequence encoding EBV gp350 protein having a deletion in the membrane spanning region and the remaining carboxy terminus, and/or a deletion of the signed sequence, said DNA sequence having a mutation at one or more splice sites preventing formation of a gp220 mRNA transcript; and

(b) isolating the expressed homogeneous gp350 from the cell and culture medium.

2. The method of Claim 1 wherein the homogeneous gp350 is further isolated by ultrafiltration, gel filtration, ion exchange, and hydrophobic interaction chromatography.

3. The method of Claim 1 or 2 wherein the homogeneous gp350 is formulated in admixture with a pharmaceutically acceptable carrier.

4. The method of Claim 3 wherein the pharmaceutically acceptable carrier is an adjuvant/antigen presentation system.

5. The method of Claim 1 wherein said mutation at one or more splice sites is a mutation in the donor splice site.

6. The method of Claim 1 wherein said mutation at one or more splice sites is a mutation in the acceptor splice site.

7. The method of Claim 5 or 6 in which at least one native nucleotide encoding serine at codon 501 of SEQ. ID. No.: 18 is replaced with a non-native nucleotide, and in which at least one native nucleotide encoding glycine at codon 698 of SEQ. ID. No.: 18 is replaced with a non-native nucleotide.

8. The method of Claim 6 wherein the DNA encodes a shortened version of EBV gp350 having a deletion of at least 8 amino acids in the membrane spanning region, resulting in a secreted product.

9. The method of Claim 8 wherein said mutation at one or more splice sites is a mutation in the donor splice site.

10. The method of Claim 8 wherein said mutation at one or more splice site is a mutation in the acceptor splice site.